

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 11136156  
PUBLICATION DATE : 21-05-99

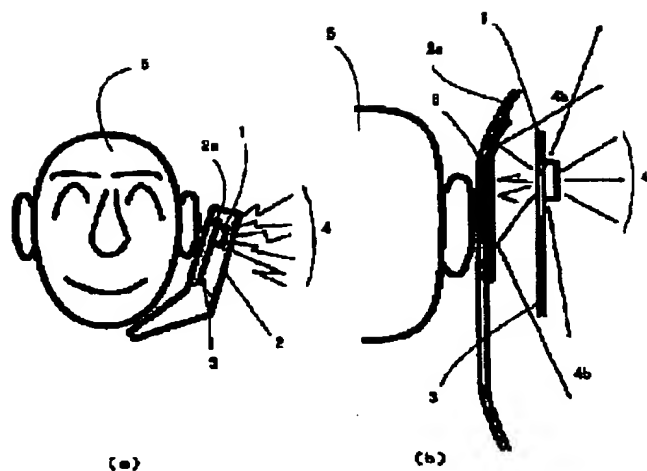
APPLICATION DATE : 29-10-97  
APPLICATION NUMBER : 09296078

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INT.CL. : H04B 1/38 H01Q 1/24 H01Q 19/10  
H05K 9/00

TITLE : MOBILE OBJECT COMMUNICATION  
DEVICE



**ABSTRACT :** PROBLEM TO BE SOLVED: To reduce bad effects which are given to a human body by radio waves by cutting off radio-frequency radiation that is emitted from a chip antenna in the direction of the human body and also providing a means which converges and emphasizing radio waves that are inputted to the chip antenna.

**SOLUTION:** A chip antenna 1 is installed on a printed circuit 3 that is provided in an enclosure 2 and a part of radio waves 4 that are outputted from the antenna 1 is reflected against a part 2a of the enclosure 2 which is located between the antenna 1 and a human body 5. This reduces radio-frequency radiation in the direction of the human body due to the waves 4. Also, a radio wave reflecting layer 6 is provided on the part 2a of the enclosure 2 which is located between the antenna 1 installed on the circuit 3 and the body 5 and the part 2a of the enclosure 2 on which the layer 6 is provided is formed on a curved surface. With this, a part 4a of radio waves that are emitted is directly emitted into air and other radio waves 4b are reflected against the layer 6 and emitted into air. Then, radio waves that are emitted in the direction of the body 5 are reduced remarkably.

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